pH Testing Rainbow

Kit contains:

- pH testing strips
- pH color-match scale
- science rainbow template

You will need: various liquids, paper towels, safety gloves (recommended), a pencil, and ADULT SUPERVISION.

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In chemistry, we describe substances as **acids** or **bases**. Acids, like lemonade, may taste tangy or sour. This is because acids have lots of **hydrogen ions**. Bases, like baking soda, may taste bitter or feel soapy. This is because bases have lots of **hydroxide ions**. But wait! Taste testing chemicals is dangerous. Don't do it! Luckily, we have indicators like **pH testing strips** that use colors to show how acidic, basic, or **neutral** (balanced) they are. Your pH strips are not ultra-scientifically accurate, but they're fun for investigation.

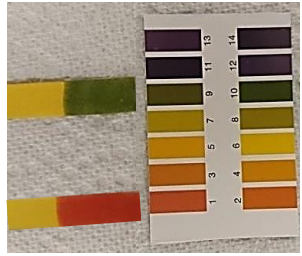
INSTRUCTIONS

Step 1: Collect. Gather an assortment of liquids to test. Examples: vinegar, lemon juice, cola, baking soda dissolved in water, window cleaner.

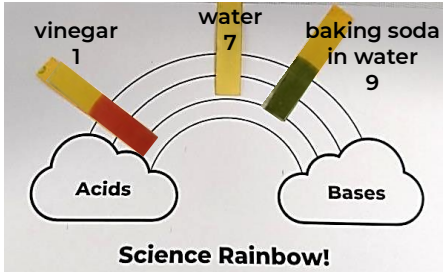
Note: Some liquids, like drain cleaner, are dangerous. Get ADULT HELP with any items you don't normally touch.

Step 2: Prep. Set out samples of your liquids, paper towels for mess prevention, pH testing strips, and your pH color-match scale. Put on safety gloves if you have them.

Step 3: Test. Dip a pH strip in a liquid for 1 second. Compare it to the colors on your pH color-match scale. Record the liquid name and corresponding number. Repeat with your other liquids.



Step 4. Make a science rainbow! Arrange your test strips in numerical order from most acidic to most basic on the science rainbow template. Label your liquids and their pH numbers.



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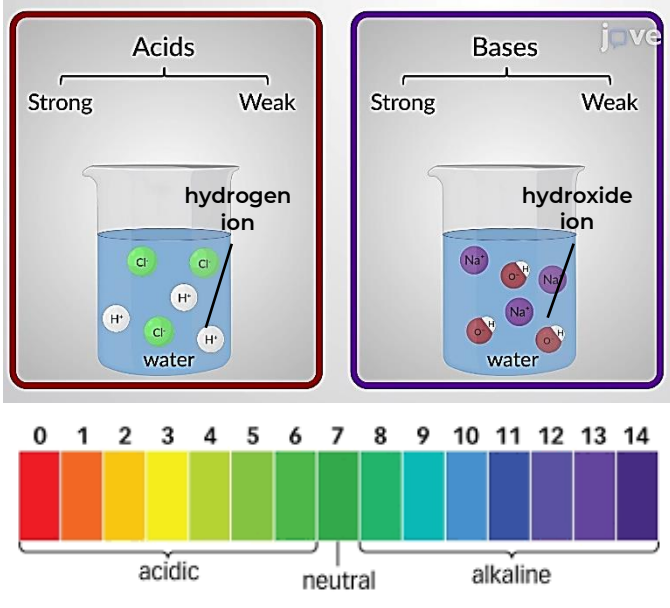
pH stands for potential hydrogen (or power of hydrogen). Substances with a pH less than 7 are acids: the smaller the number, the more acidic. Substances with a pH greater than 7 are bases: the greater the number, the more basic (**alkaline**). A pH of 7 is neutral.



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